1. A method of consolidating a zone or formation and forming a chemical casing comprising:

(a) drilling the zone or formation with a drilling fluid having a pH in the range of from about 6 to about 10 and that comprises water, a polymeric cationic catalyst capable of accepting and donating protons, a particulate curable solid thermoset resin and a delayed acid catalyst for curing the solid resin, the drilling fluid forming a filter cake on the walls of the zone or formation that cures and consolidates the zone or formation; and

(b) contacting the filter cake formed in step (a) with a treating fluid that comprises water, a water soluble or dispersible polymer which is capable of being cross-linked by a thermoset resin and causing the resin to harden when cured, and a water soluble or dispersible thermoset resin, the treating fluid components depositing on the filter cake formed in step (a) and the thermoset resin curing into a hardened cross-linked chemical casing on the walls of the zone or formation.

2. The method of claim 1 wherein the zone or formation comprises unconsolidated rocks and minerals selected from the group consisting of clays, shales and sand stone and wherein said polymeric cationic catalyst is adsorbed on the rocks and minerals in the zone or formation.

3. The method of claim 1 wherein the polymeric cationic catalyst is selected from the group consisting of polyethyleneimine, poly(dimethylaminoethylmethacrylate) and poly(dimethylaminopropylmethacrylate).

4. The method of claim 1 wherein the particulate curable solid thermoset resin is selected from the group consisting of particulate solid melamine-formaldehyde type resins, particulate solid urea-formaldehyde type resins and particulate solid phenol-formaldehyde type resins.

5. The method of claim 1 wherein the particulate curable solid thermoset resin is selected from the group consisting of an alkyl ether of a melamine-formaldehyde resin and an alkyl ether of a urea-formaldehyde resin.

6. The method of claim 1 wherein the acid in the delayed acid catalyst is an organic or inorganic acid selected from the group consisting of p-toluene sulfonic acid, dinonylnaphthalene sulfonic acid, dodecyl benzene sulfonic acid, oxalic acid, maleic acid, hexamic acid, a copolymer of phthalic and acrylic acid, trifluoromethane sulfonic acid, phosphonic acid, sulfuric acid, hydrochloric acid, sulfamic acid and ammonium salts that produce acids when dissolved in water.

7. The method of claim 1 wherein the water soluble or dispersible polymer which is cross-linked by the thermoset resin is selected from the group consisting of polymers containing one or more of hydroxyl, amide, carboxyl and epoxy functional groups.

8. The method of claim 1 wherein the water soluble or dispersible polymer which is cross-linked by the thermoset resin is selected from the group consisting of polyvinylalcohol, polyvinylbutyral, polyesters, polyalkylacrylic acids, polyurethanes, acrylamide polymers, proteins, polyols and polysaccharides.

9. The method of claim 8 wherein the polysaccharide is selected from the group consisting of chitosan, hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, water soluble starches, guar gum, xanthan gum, welan gum, carragenan gum and arabic gum.

10. The method of claim 1 wherein the water soluble or dispersible thermoset resin is selected from the group consisting of melamine-formaldehyde type resins, urea-formaldehyde type resins and phenol-formaldehyde type resins.

11. The method of claim 1 wherein the water soluble or dispersible thermoset resin is selected from the group consisting of an alkyl ether of a melamine-formaldehyde resin and an alkyl ether of a urea-formaldehyde resin.

12. The method of claim 1 wherein the drilling fluid further comprises one or more insoluble chemical casing reinforcing materials selected from the group consisting of carbon fibers, glass fibers, mineral fibers, cellulose fibers, silica, zeolite, alumina, calcium sulfate hemihydrate, acrylic latexes, polyol-polyesters and polyvinyl butyral.

13. The method of claim 12 wherein the one or more insoluble chemical casing reinforcing materials are present in the drilling fluid in an amount in the range of from about 2% to about 25% by weight of water in the drilling fluid.

14. The method of claim 1 wherein the polymeric cationic catalyst is present in the drilling fluid in an amount in the range of from about 1% to about 15% by weight of water in the drilling fluid.

15. The method of claim 1 wherein the particulate curable solid thermoset resin is present in the drilling fluid in an amount in the range of from about 5% to about 50% by weight of water in the drilling fluid.

16. The method of claim 1 wherein the acid in the delayed acid catalyst is present in the drilling fluid in an amount in the range of from about 0.5% to about 8% by weight of thermoset resin in the drilling fluid.

17. The method of claim 1 wherein the water soluble or water dispersible polymer which is cross-linked by the thermoset resin is present in the treating fluid in an amount in the range of from about 0.5% to about 20% by weight of water in the treating fluid.

18. The method of claim 1 wherein the water soluble or dispersible thermoset resin is present in the treating fluid in an amount in the range of from about 5% to about 80% by weight of water in the treating fluid.

19. The method of claim 1 wherein the drilling fluid and treating fluid both have a pH of about 8.

20. A method of consolidating a zone or formation and forming a chemical casing in a well bore penetrating the zone or formation while drilling the well bore comprising:

(a) drilling the well bore with a drilling fluid having a pH in the range of from about 6 to about 10 and comprised of water, a polymeric cationic catalyst capable of accepting and donating protons, a particulate curable solid thermoset resin and a delayed acid catalyst for curing the solid resin, the drilling fluid forming a filter cake on the walls of the well bore that cures and consolidates the zone and formation penetrated by the well bore; and

(b) contacting the well bore with a treating fluid that comprises water, a water soluble or dispersible polymer which is capable of being cross-linked by a thermoset resin and causing the resin to harden when cured, and a water soluble or dispersible thermoset resin, the treating fluid components depositing on the filter cake formed in step (a) and the thermoset resin curing into a hardened cross-linked chemical casing on the walls of the well bore.

21. The method of claim 20 wherein the zone or formation comprises unconsolidated rocks and minerals selected from the group consisting of clays, shales and sand stone and wherein said polymeric cationic catalyst is adsorbed on the rocks and minerals in the zone or formation.

22. The method of claim 20 wherein the polymeric cationic catalyst is selected from the group consisting of polyethyleneimine, poly(dimethylaminoethylmethacrylate) and poly(dimethylaminopropylmethacrylate).

23. The method of claim 20 wherein the particulate curable solid thermoset resin is selected from the group consisting of particulate solid melamine-formaldehyde type resins, particulate solid urea-formaldehyde type resins and particulate solid phenol-formaldehyde type resins.

24. The method of claim 20 wherein the particulate curable solid thermoset resin is selected from the group consisting of an alkyl ether of a melamine-formaldehyde resin and an alkyl ether of a urea-formaldehyde resin.

25. The method of claim 20 wherein the acid in the delayed acid catalyst is an organic or inorganic acid selected from the group consisting of p-toluene sulfonic acid, dinonylnaphthalene sulfonic acid, dodecyl benzene sulfonic acid, oxalic acid, maleic acid, hexamic acid, a copolymer of phthalic and acrylic acid, trifluoromethane sulfonic acid, phosphonic acid, sulfuric acid, hydrochloric acid, sulfamic acid and ammonium salts that produce acids when dissolved in water.

26. The method of claim 20 wherein the water soluble or dispersible polymer which is cross-linked by the thermoset resin is selected from the group consisting of polymers containing one or more of hydroxyl, amide, carboxyl and epoxy functional groups.

27. The method of claim 20 wherein the water soluble or dispersible polymer which is cross-linked by the thermoset resin is selected from the group consisting of polyvinylalcohol, polyvinylbutyral, polyesters, polyalkylacrylic acids, polyurethanes, acrylamide polymers, proteins, polyols and polysaccharides.

28. The method of claim 27 wherein the polysaccharide is selected from the group consisting of chitosan, hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, water soluble starches, guar gum, xanthan gum, welan gum, carragenan gum and arabic gum.

29. The method of claim 20 wherein the water soluble or dispersible thermoset resin is selected from the group consisting of melamine-formaldehyde type resins, urea-formaldehyde type resins and phenol-formaldehyde type resins.

30. The method of claim 20 wherein the water soluble or dispersible thermoset resin is selected from the group consisting of an alkyl ether of a melamine-formaldehyde resin and an alkyl ether of a urea-formaldehyde resin.

31. The method of claim 20 wherein the drilling fluid further comprises one or more insoluble chemical casing reinforcing materials selected from the group consisting of carbon fibers, glass fibers, mineral fibers, cellulose fibers, silica, zeolite, alumina, calcium sulfate hemihydrate, acrylic latexes, polyol-polyesters and polyvinyl butyral.

32. The method of claim 31 wherein the one or more insoluble chemical casing reinforcing materials are present in the drilling fluid in an amount in the range of from about 2% to about 25% by weight of water in the drilling fluid.

33. The method of claim 20 wherein the polymeric cationic catalyst is present in the drilling fluid in an amount in the range of from about 1% to about 15% by weight of water in the drilling fluid.

34. The method of claim 20 wherein the particulate curable solid thermoset resin is present in the drilling fluid in an amount in the range of from about 5% to about 50% by weight of water in the drilling fluid.

35. The method of claim 20 wherein the acid in the delayed acid catalyst is present in the drilling fluid in an amount in the range of from about 0.5% to about 8% by weight of thermoset resin in the drilling fluid.

36. The method of claim 20 wherein the water soluble or water dispersible polymer which is cross-linked by the thermoset resin is present in the treating fluid in an amount in the range of from about 0.5% to about 20% by weight of water in the treating fluid.

37. The method of claim 20 wherein the water soluble or dispersible thermoset resin is present in the treating fluid in an amount in the range of from about 5% to about 80% by weight of water in the treating fluid.

38. The method of claim 20 wherein the drilling fluid and treating fluid both have a pH of about 8.

39. A method of consolidating a zone or formation and forming a chemical casing in a well bore penetrating the zone or formation to improve the strength of the well bore or to provide zonal isolation, or both, while drilling the well bore comprising: (a) drilling the well bore with a drilling fluid having a pH of about 8 and comprised of water, a cationic, polyethyleneimine catalyst which is adsorbed on the zone or formation and is present in an amount in the range of from about 2% to about 10% by weight of water in the drilling fluid, a particulate curable solid alkyl ether of a melamine-formaldehyde resin present in an amount in the range of from about 10% to about 30% by weight of water in the drilling fluid and a dispersible delayed ammonium chloride acid catalyst for curing the resin present in the drilling fluid in an amount in the range of from about 1% to about 6% by weight of the resin, the drilling fluid forming a filter cake on the walls of the well bore that cures and consolidates the zone or formation penetrated by the well bore; and (b) contacting the well bore with a treating fluid comprised of water, a water soluble or dispersible polysaccharide polymer which is capable of being cross-linked by a thermoset resin and causing the resin to harden when cured present in the treating fluid in an amount in the range of from about 1% to about 10% by weight of water in the treating fluid, a water soluble or dispersible alkyl ether of melamine-formaldehyde resin present in the treating fluid in an amount in the range of from about 20% to about 70% by weight of water in the treating fluid, the treating fluid components depositing on the filter cake formed in step (a) and the resins curing into a hardened cross-linked chemical casing on the walls of the well bore.

40. A method of consolidating an unconsolidated zone or formation formed of clay, shale and/or sand stone and forming a chemical casing in a well bore penetrating the zone or formation comprising:

(a) drilling the well bore with a drilling fluid having a pH in the range of from about 6 to about 10 and comprised of water, a polymeric cationic catalyst capable of accepting and donating protons which is adsorbed on the clay, shale and/or sand stone, a particulate curable solid thermoset resin and a delayed acid catalyst for curing the solid resin, the drilling fluid forming a filter cake on the walls of the well bore that cures and consolidates the unconsolidated zone or formation penetrated by the well bore; and

(b) contacting the well bore with a treating fluid comprised of water, a water soluble or dispersible polymer which is capable of being cross-linked by a thermoset resin and causing the resin to harden when cured and a water soluble or dispersible thermoset resin, the treating fluid components depositing on the filter cake formed in step (a) and the thermoset resin curing into a hardened cross-linked chemical casing on the walls of the well bore.

41. The method of claim 40 wherein the polymeric cationic catalyst is selected from the group consisting of polyethyleneimine, poly(dimethylaminoethylmethacrylate) and poly(dimethylaminopropylmethacrylate).

42. The method of claim 40 wherein the particulate curable solid thermoset resin is selected from the group consisting of particulate solid melamine-formaldehyde type resins, particulate solid urea-formaldehyde type resins and particulate solid phenol-formaldehyde type resins.

43. The method of claim 40 wherein the particulate curable solid thermoset resin is selected from the group consisting of an alkyl ether of a melamine-formaldehyde resin and an alkyl ether of a urea-formaldehyde resin.

44. The method of claim 40 wherein the acid in the delayed acid catalyst is an organic or inorganic acid selected from the group consisting of p-toluene sulfonic acid, dinonylnaphthalene sulfonic acid, dodecyl benzene sulfonic acid, oxalic acid, maleic acid, hexamic acid, a copolymer of phthalic and acrylic acid, trifluoromethane sulfonic acid, phosphonic acid, sulfuric acid, hydrochloric acid, sulfamic acid and ammonium salts that produce acids when dissolved in water.

45. The method of claim 40 wherein the water soluble or dispersible polymer which is cross-linked by the thermoset resin is selected from the group consisting of polymers containing one or more of hydroxyl, amide, carboxyl and epoxy functional groups.

46. The method of claim 40 wherein the water soluble or dispersible polymer which is cross-linked by the thermoset resin is selected from the group consisting of polyvinylalcohol, polyvinylbutyral, polyesters, polyalkylacrylic acids, polyurethanes, acrylamide polymers, proteins, polyols and polysaccharides.

47. The method of claim 46 wherein the polysaccharides are selected from the group consisting of chitosan, hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, water soluble starches, guar gum, xanthan gum, welan gum, carragenan gum and arabic gum.

48. The method of claim 40 wherein the water soluble or dispersible thermoset resin is selected from the group consisting of melamine-formaldehyde type resins, urea-formaldehyde type resins and phenol-formaldehyde type resins.

49. The method of claim 40 wherein the water soluble or dispersible thermoset resin is selected from the group consisting of an alkyl ether of a melamine-formaldehyde resin and an alkyl ether of a urea-formaldehyde resin.

50. The method of claim 40 wherein the drilling fluid further comprises one or more insoluble chemical casing reinforcing materials selected from the group consisting of carbon fibers, glass fibers, mineral fibers, cellulose fibers, silica, zeolite, alumina, calcium sulfate hemihydrate, acrylic latexes, polyol-polyesters and polyvinyl butyral.

51. The method of claim 50 wherein the one or more insoluble chemical casing reinforcing materials are present in the drilling fluid in an amount in the range of from about 2% to about 25% by weight of water in the drilling fluid.

52. The method of claim 40 wherein the polymeric cationic catalyst is present in the drilling fluid in an amount in the range of from about 1% to about 15% by weight of water in the drilling fluid.

53. The method of claim 40 wherein the particulate curable solid thermoset resin is present in the drilling fluid in an amount in the range of from about 5% to about 50% by weight of water in the drilling fluid.

54. The method of claim 40 wherein the acid in the delayed acid catalyst is present in the drilling fluid in an amount in the range of from about 0.5% to about 8% by weight of thermoset resin in the drilling fluid.

55. The method of claim 40 wherein the water soluble or water dispersible polymer which is cross-linked by the thermoset resin is present in the treating fluid in an amount in the range of from about 0.5% to about 20% by weight of water in the treating fluid.

56. The method of claim 40 wherein the water soluble or dispersible thermoset resin is present in the treating fluid in an amount in the range of from about 5% to about 80% by weight of water in the treating fluid.

57. The method of claim 40 wherein the drilling fluid and treating fluid both have a pH of about 8.

58. A method of consolidating unconsolidated zone or formation formed of clays, shales and/or sand stone and forming a chemical casing in a well bore penetrating the zone or formation to improve the strength of the well bore or to provide zonal isolation, or both, while drilling the well bore comprising: (a) drilling the well bore with a drilling fluid having a pH of about 8 and that comprises water, a cationic, polyethyleneimine catalyst which is adsorbed on the clays, shales and/or sand stone and is present in an amount in the range of from about 2% to about 10% by weight of water in the drilling fluid, a particulate curable solid alkyl ether of a melamine-formaldehyde resin present in an amount in the range of from about 10% to about 30% by weight of water in the drilling fluid and a dispersible delayed ammonium chloride acid catalyst for curing the resin present in the drilling fluid in an amount in the range of from about 1% to about 6% by weight of the resin, the drilling fluid forming a filter cake on the walls of the well bore that cures and consolidates the zone or formation penetrated by the well bore; and (b) contacting the well bore with a treating fluid comprised of water, a water soluble or dispersible polysaccharide polymer which is capable of being cross-linked by a thermoset resin and causing the resin to harden when cured present in the treating fluid in an amount in the range of from about 1% to about 10% by weight of water in the treating fluid, a water soluble or dispersible alkyl ether of melamine-formaldehyde resin present in the treating fluid in an amount in the range of from about 20% to about 70% by weight of water in the treating fluid, the treating fluid components depositing on the filter cake formed in step (a) and the resins curing into a hardened cross-linked chemical casing on the walls of the well bore.